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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/814,679
Filing Date: March 31, 2004
Appellant(s): HOOD ET AL.

Mark F. Wachter
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/12/08 appealing from the Office action
mailed 10/22/08

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. It is noted that Appellant states that the rejections over Rochlis, Rochlis in view of Akeno and Rochlis in view of Akeno and further in view of Clune are new rejections. However, the rejections were originally made in the action dated 4/10/08, (paragraphs 3-5) and were made final in the action dated 10/22/08.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,312,583	ROCHLIS	4-1967
5,657,517	AKENO et al	8-1997
5,976,643	SALLEE	11-1999
6,162,040	CLUNE	12-2000
4,329,196	RAWLINSON	5-1982
5,790,987	SESSELMANN	8-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 34-39, 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Rochlis, U.S. Patent No. 3,312,583. Rochlis discloses an integral, unitary, molded article formed from a thermoplastic polymer, (col. 1, lines 12-27), such as a vinyl polymer, (col. 12, lines 19-40), which comprises a base structure and a plurality of projecting elements. The projecting elements can be formed so that they have different colors, which meets the limitation of the projecting elements being made from different polymers, or the elements may differ in their hardness or other characteristics, (see col. 1, line 65 - col. 2, line 7; col. 0, lines 61 – col. 10, line 24). The base sheet can be solid or porous. See col. 7, lines 45-59. The polymer material comprises pigments to determine the different colors of the projections. The base sheet can be combined with other layers (col.12, lines 41-60), including slip resistant layers, (col. 6, lines 43-46). The finished material can be used in a variety of ways, including as a “zipper” fastener,

Art Unit: 1794

(i.e., hook and loop type fasteners). See col. 11, lines 43-46. The base sheet can be a different color than the projections. See col. 10, lines 53- 63.

Claims 1-5, 7, 9-13, 15, 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rochlis, U.S. Patent No. 3,312,583 in view of Akeno et al, U.S. Patent No. 5,657,517. Rochlis discloses an integral, unitary, molded article formed from a thermoplastic polymer, (col. 1, lines 12-27), such as a vinyl polymer, (col. 12, lines 19-40), which comprises a base structure and a plurality of projecting elements. The projecting elements can be formed so that they have different colors, which meets the limitation of the projecting elements being made from different polymers, or the elements may differ in their hardness or other characteristics, (see col. 1, line 65 - col. 2, line 7; col. 0, lines 61 – col. 10, line 24). The base sheet can be solid or porous. See col. 7, lines 45-59. The polymer material comprises pigments to determine the different colors of the projections. The base sheet can be combined with other layers (col.12, lines 41-60), including slip resistant layers, (col. 6, lines 43-46). The finished material can be used in a variety of ways, including as a “zipper” fastener, (i.e., hook and loop type fasteners). See col. 11, lines 43-46. The base sheet can be a different color than the projections. See col. 10, lines 53- 63. Rochlis differs from the claimed invention because Rochlis does not have the claimed structure of the projecting elements, wherein the portion of the projecting elements near the base layer comprise a core and a surface portion and the projecting elements further comprise a terminal portion, wherein the core and the terminal portion are made of one polymer and the surface portion is made of another polymer. Akeno discloses a reinforced molded

Art Unit: 1794

structure of projecting elements suitable for use in fasteners, comprising a projecting element having a portion near the base layer and a terminal portion and a plurality of reinforcing ribs (element 13 in the figures) formed on the surface of the projecting element near the base layer. See figures. The reinforcing elements correspond to the claimed surface portion. The projecting element which extends from the base to the terminal portion corresponds to the claimed core and terminal portions. It would have been obvious to have formed the projecting elements of Rochlis so that they had the structure of the projecting elements of Akeno, in order to form a material wherein the hook fasteners are reinforced. It further would have been obvious to have employed different polymers, which differed in color, hardness, etc., as taught in Rochlis, in order to form a material which had an improved appearance, strength, etc.

Claims 8, 40, 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rochlis in view of Akeno as applied to claims above, and further in view of Clune, U.S. Patent NO. 6,162,040. Rochlis differs from the claimed invention because while Rochlis teaches employing thermoplastic polymers to form the molded article, it does not teach employing polyolefins or polyethylene specifically. Further, Rochlis does not specify the inclusion of metal oxides as a component in the polymer. However, with regard to the metal oxides, since Rochlis does teach including pigments and since titanium dioxide is a conventional and well known white pigment, (Rochlis teaches forming some of the projections so that they are white), it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed titanium dioxide as a pigment to color some of the projections white in Rochlis, based

Art Unit: 1794

upon the well known and conventional use of titanium dioxide as a white pigment. With regard to the use of other polymers such as polyethylene to form the projections, Rochlis teaches employing thermoplastic polymers generally, and specifically refers to vinyl polymers. Clune teaches that additional thermoplastic polymers which are suitable for forming molded fastener elements include polyethylene and polypropylene. See col. 5, lines 35-44. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed polyethylene and polypropylene as the thermoplastic polymers in Rochlis, in view of the teaching of Clune that such polymers were recognized in the art as suitable for this purpose. With regard to the particular density of the polyolefins, the person of ordinary skill in the art would have been able to select the polymers which produced projecting elements having the desired properties such as flexibility, hardness, resilience, etc., through the process of routine experimentation, in order to form a material having the optimum and desired properties.

Claim 1, 3, 5, 7, 8, 10-12, 34-40, 42-44 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sallee, U.S. Patent No. 5,976,643. Sallee discloses a base sheet material with a plurality of garnishes projecting therefrom (Figure 1). The base material is constructed of a rigid plastic backing (column 4, lines 1-7) and the garnishes are also formed from plastic material (column 3, lines 58- 67). The garnishes meet the claimed limitations for the projecting element portions because the polymer that forms the terminal part of the garnish is also present in the core of the base section, which is made from a different

Art Unit: 1794

polymer (see Figures 5-7). The base section meets the limitations of the surface of the lower part of the projecting element. With regard to claims 3 and 11, the base sheet must contain at least one pigment that is different from one of the projecting elements since the base sheet is formed of multiple colors (column 4, line 1). With regard to claim 5, the retaining ring is preferably Delrin (column 6, line 21), which is a thermoplastic acetal. With regard to claim 7, various colors are used to create a camouflaged appearance (column 5, lines 20-21). With regard to claim 8, the garnish is made from polyethylene (column 3, line 60). With regard to claim 10, the base sheet has holes (Figure 1). With regard to claim 12, the base material is also camouflaged (column 4, line 1). With regard to claim 15, a plurality of projecting elements is present (Figure 1).

With regard to claims 34 and 35, the garnishes would comprise at least a first plurality of projecting elements and a second plurality of projecting elements because each set may be colored differently to effect a camouflaged pattern (column 5, lines 11-21). With regard to claims 36, 37, 43, and 44, the base sheet must contain at least one pigment that is different from one of the projecting elements since the base sheet is formed of multiple colors (column 4, line 1). With regard to claims 38 and 40, Sallee discloses the garnishes are made from polyethylene (column 3, line 60).

With regard to the limitation that the planar portion and the projecting portion are integrally molded, Sallee teaches that the attachment of the projecting portion to the base portion may be "permanent". See col. 5, lines 30-45. A structure which is permanently bonded is an integral structure. With regard to the limitation that the structure is molded, a molded structure is one which is produced by a molding process.

Art Unit: 1794

Sallee does not teach a molding process but teaches the claimed integral structure.

The instant claims are drawn to a product and not to how the product is made. "The patentability of a product does not depend on its method of production. If the product in the product - by - process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to Appellant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

The use of 35 USC 102/103 rejections for product by process claim has been approved by the courts. "[T]he lack of physical description in a product - by - process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product - by - process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put

Art Unit: 1794

before it and then obtain prior art products and make physical comparisons therewith."

In re Brown , 173 USPQ 685, 688 (CCPA 1972).

Therefore, in the instant case, the burden is on the Appellant to show that the claimed process produces an unobvious difference between the claimed product and the prior art product.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sallee. With regard to claims 2 and 4, Sallee does not disclose what color the retaining collar, which comprises the claimed wall of the projecting element, might be. Sallee does disclose that the material is multi-colored though (column 5, lines 11-21). It would have been obvious to a person having ordinary skill in the art to use two distinct pigments for the retaining collar and the tufts, since the tufts form a camouflaged pattern and making retaining rings with the exact same color for each tuft would create an unnecessary and great expense because the retaining rings are not disclosed as contributing to the camouflaged pattern.

Claims 13 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sallee in view of Rawlinson (U.S. Patent No. 4,329,196).

Sallee does not disclose what density the polyethylene material should be.

Rawlinson teaches that grass-like material made from polyethylene should have a density between 0.90 and 0.93 (column 3, lines 8-10). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a polyethylene with a density between 0.915 and 0.92 in the garnish of Sallee, since such' range is

Art Unit: 1794

embraced by the art as being known and it has been held to been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). t

Claims 14 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sallee in view of Sesselmann (U.S. Patent No. 5,790,987).

Sallee teaches the material may be used on a person (Abstract), but does not disclose the use of filler. Sesselmann teaches that alumina may be added to camouflage material to help reduce odor (column 2, lines 5-27). It would have been obvious to a person having ordinary skill in the art at the time of the invention to include alumina in the material of Sallee in order to reduce odor, as taught by Sesselmann.

(10) Response to Argument

It is noted that the examiner is taking sections 7 and 8 together as the arguments section with headings for each ground of rejection beginning on page 26. Appellant's summary of relevant law has been reviewed. Appellant's discussion of arbitrary and capricious action and complete prosecution are not appealable issues.

With regard to Rochlis, Appellant argues that the Examiner concludes without support or explanation that because Rochlis discloses that the projecting elements can be formed so that they have different colors that this meets the limitation of the projecting elements being made from different polymers and requests that the examiner provide an affidavit under 37 CFR 1.104(d)(2) to substantiate the examiner's person knowledge since there is no such information contained within the four corners of

Art Unit: 1794

Rochlis. However, independent claim 34 recites a first polymer material and a second polymer material. The instant specification defines that the distinct polymers making up the first and second polymer materials may comprise distinct polymers or comprise the same base polymer with different additives, e.g., dyes or pigment of different colors other fillers. See page 3, lines 7-20 of the instant specification. Therefore, the examiner looked to the specification to interpret what the claimed limitations of first and second polymer material meant. The structure set forth by Rochlis meets the structure defined in the specification. Therefore, no affidavit is necessarily.

Appellant argues that neither Rochlis nor Akeno teach the claimed structure of the lower part including a core and a surface wherein the core and the terminal part of the projecting element portion are formed of a first polymer material and the surface is formed of a second polymer. However, as set forth in the rejection above, Akeno teaches a structure having projecting elements which are reinforced with ribs as shown in the figures. The ribs correspond to the claimed surface and the projecting elements correspond to the claimed core and terminal part. Akeno teaches that the ribs reinforce the projecting parts. Therefore, it would have been obvious to have formed the projecting elements of Rochlis so that they had the reinforcing ribs taught by Akeno. Appellant also states that the rejection is deficient because the claims do not relate to reinforcing elements. However, the rejection clearly equated the reinforced ribs shown in Akeno with the claimed surface parts and the projecting elements with the claimed core and terminal parts. Appellant again states that Rochlis does not teach different

Art Unit: 1794

polymers. This argument is addressed above with regard to the 102(b) rejections over Rochlis.

Appellant argues that Rochlis and Akeno do not teach the claimed features of claims 4, 11 and 15 of a plurality of projecting elements and different pigments. However, both references clearly teach a plurality of projecting elements. See figures. Further, as noted above, Rochlis teaches forming the materials of different colored polymers by adding pigments.

Appellant argues that Saltee does not teach the use of two different polymers as required by the claims. However, Saltee teaches that the base material may be Delrin, which is a thermoplastic acetal and that the garnish, *projecting elements) can be made from polyethylene. See col. 3, line 60. Saltee further teaches employing different colored pigments in the base and the garnish. See col. 5, lines 11-21.

Appellant argues that Saltee does not teach an integrally molded structure. The examiner has acknowledged that Saltee does not teach a molded structure. However, Saltee teaches that the attachment of the projecting portion to the base portion may be "permanent". See col. 5, lines 30-45. A structure which is permanently bonded, (or connected, or attached, or combined, etc.), would be an integral structure and there is nothing on the record which would structurally distinguish such a permanently bonded integral structure from a molded integral structure. Appellant argues that claims recite an integrally molded structure and that this is a product limitation not a process limitation, but the way in which Appellant distinguishes the claimed molded article is to

Art Unit: 1794

say that unlike the prior art is it formed by integrally molding the components. Appellant appears to be arguing that integrally molded is a structural, not a process limitation, but then argues that the prior art products are not made the same way. The claims do not define the structure in any way that distinguishes the claimed structure from the prior art structure. The examiner has taken the position that there is no apparent difference between an integrally molded product and a permanently bonded, connected, attached, joined, etc., product. The claims state that the product is integrally molded and Appellant asserts that this is a structural difference, but Appellant does not state what the difference is. Appellant has not provided arguments establishing what the product difference is between an integrally molded product or a product wherein components are permanently attached, joined, bonded, etc.

Appellant argues that there is no discussion or the required analysis for an obviousness rejection in the rejection over Sallee. However, the rejection over Sallee is a 102/103 rejection, which is a different analysis than a 103 rejection. Sallee appears to disclose the claimed structure except that it does not teach forming the product by molding. However, since Sallee teaches a permanent bond between the components, Sallee teaches an integral structure and therefore the burden is shifted to Appellant to show that the difference in which the product is made, (i.e., forming the integral structure by molding rather than by forming a "permanent" bond by other methods which are not disclosed by known in the art such as lamination, ultrasonic welding, co-extrusion, and molding since that is also a known method of forming a permanent bond or attachment, etc), would result in an unobvious difference between the claimed

Art Unit: 1794

product and the prior art product. Appellant states that the term molded imparts structure but does not state what the structure imparted by virtue of being integrally molded is, and the claims do not recite structure which distinguishes the claimed structure from a structure such as is set forth in Sallee which is not formed by integrally molding, but which is formed so that the components are permanently combined.

Appellant argues that permanently bonded is different than permanently attached and that both are different than integrally molded, because in integrally molded there is no interface between the various portions that are joined together providing a continuum of material. However, this definition of integrally molded is not found in the claims.

Further, as noted above, in injection molding, an integral molded article is formed where there is an interface between various portions. The limitations that Appellant is arguing regarding integrally molded are not found in the instant claims.

Appellant states that Sallee is teaching that the parts can be both permanent and removable. However, the examiner does not interpret the teaching of Sallee as being that the parts should be both permanently attached and removable, but rather that the parts can either be permanently attached or removable. See col. 5, lines 30-44 which states that the attachment can be permanent or more preferably releasable and reattachable. Sallee notes that various known means of permanent attachment are applicable.

Appellant's discussion of arbitrary and capricious action is not an appealable issue. Appellant's reference to other patents is noted. The examiner does not comment on issued U.S. patents.

Art Unit: 1794

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Elizabeth M. Cole/

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